



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,952	12/09/1999	GUILLAUME SEBIRE	874.0002USU	8252
29683	7590	04/08/2004	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			NGUYEN, DAVID Q	
			ART UNIT	PAPER NUMBER
			2681	16

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/457,952

Applicant(s)

SEBIRE ET AL.

Examiner

David Q Nguyen

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 03/08/04 have been fully considered but they are not persuasive.

In response to Applicants' Remarks on page 9, **Applicants agree:**

Tdoc 2E99-501 in Section 2 describes "filter length" as follows:

"the filter length is theoretically infinite. However, from some point, the weighting coefficients can be considered as negligible. Therefore the filter length can be considered as finited. This finite length shouldalso be understood as the number of input data which is required to stabilize the filter output."

The concept of a "filter length" is thus one that is clearly known in the prior art, and one skilled in the art would clearly understand what is meant by a filter length.

#### **Examiner disagrees because:**

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

Art Unit: 2681

Applicants are advised to see 2163.07(a) Inherent Function, Theory, or Advantage and 2163.07 (b) Incorporation by Reference.

In response to Applicants' Remarks on pages 9 and 10, **Applicants agree:**

The meaning of a "filter operation" should be obvious, in view of description of the invention, i.e., it is operation of the filter, or the filter in operation. Reference may be had, for example, to page 6, lines 2-11:

"The forgetting factor, in the preferred embodiment, directly influences the length of a filter (e.g., a running average filter) that operates on link quality measurement data. In an exemplary embodiment the running average filter operates on a sequence of measurements link quality, such as a mean Bit Error Probability or a coefficient of variation of the Bit Error Probability (cv) (BEP). In other embodiments of this invention the filter length could be adjusted directly, or it could be changed by using some parameter other than the forgetting factor "a".

At page 8, lines 22-26, the application states:

"For the purposes of this invention it is assumed the controller 14 is suitably programmed for obtaining the required measurement data, and for executing the measurement data filtering operations as described in further detail below."

**Examiner disagrees because:**

"The filter length" is infinite. It is clearly defined and explained in the specification as argued above. Therefore, "filter operation" and "determined parameter" are not clear.

In the previous Office Action (paper No. 13), "The calculation employing a filtering operation having a filter length that is function of the determined parameter" is rejected under 35 U.S.C. 112, first paragraph. However, Applicants ignore this rejection. Applicants still do not

Art Unit: 2681

explain or argue or point out where the specification describes or mentions “ the calculation employing a filtering operation having a filter length that is function of the determined parameter”. Correction is required.

Because Applicants’ specification does not clearly describe or explain “filter length”, “filter operation” “determined parameter” and “the calculation employing a filtering operation having a filter length that is function of the determined parameter”, Examiner understands and believes that the rejection in the previous Office Action (paper no. 13) is proper.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by “EGPRS Link Quality Control Measurements and Filtering,” ETSI SMG2 Working Session on EDGE, Tdoc SMG2 EDGE 444/99, Agenda item 6.3, October 18-22, 1999, Austin, TX (source: Ericsson).

Regarding claim 1, ETSI SMG2 discloses a method for operating a mobile equipment in a wireless network, comprising steps of determining a value of a parameter that indicative of a signal quality experienced by the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the

Art Unit: 2681

determined parameter; reporting the calculated indication of link quality to the wireless network (see pages 1-15).

Regarding claim 2, ETSI SMG2 discloses deriving an indication of ME speed in the wireless network; and transmitting the speed indication to the ME (see pages 1-15).

Regarding claim 3, ETSI SMG2 discloses transmitting uses a point-to-point message (see pages 1-15).

Regarding claim 4, ETSI SMG2 discloses wherein the step of transmitting places the speed indication in padding bits of a point-to-point message (see pages 1-15).

Regarding claim 5, ETSI SMG2 discloses wherein the step of transmitting uses a message sent on a Packet Associated Control Channel (PACCH) (see pages 1-15).

Regarding claim 6, ETSI SMG2 discloses for operating a mobile equipment (ME) in a wireless network, comprising:

Determining a value of a parameter that indicative of a signal quality experienced by the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter; and reporting the calculated indication of link quality to the wireless network; wherein determining comprises: deriving an indication of ME speed in the wireless network; and transmitting the speed indication to the ME, and wherein the step of transmitting uses a message sent in a Packet System Identification 13 (PSI13) message sent on a Packet Associated Control Channel (PACCH) (see pages 1-15).

Regarding claim 7, ETSI SMG2 discloses for operating a mobile equipment (ME) in a wireless network, comprising: Determining a value of a parameter that indicative of a

Art Unit: 2681

signal quality experienced by the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter; and reporting the calculated indication of link quality to the wireless network; wherein determining comprises: deriving an indication of ME speed in the wireless network; and transmitting the speed indication to the ME, and wherein the step of transmitting uses a plurality of bits placed into a Packet System Identification 13 (PSI13) message sent on a Packet Associated Control Channel (PACCH) (see pages 1-15).

Regarding claim 8, ETSI SMG2 discloses for operating a mobile equipment (ME) in a wireless network, comprising: Determining a value of a parameter that indicative of a signal quality experienced by the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter; and reporting the calculated indication of link quality to the wireless network; wherein determining comprises: deriving an indication of ME speed in the wireless network; and wherein the step of transmitting uses a plurality of bits into padding bits of a Packet System Identification 13 (PSI13) message sent on a Packet Associated Control Channel (PACCH) (see pages 1-15).

Regarding claim 9, ETSI SMG2 discloses for operating a mobile equipment (ME) in a wireless network, comprising: Determining a value of a parameter that indicative of a signal quality experienced by the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter; and reporting the calculated indication of link quality to the wireless network; wherein determining comprises: deriving an indication of ME speed in the

Art Unit: 2681

wireless network; and wherein the step of transmitting uses a plurality of bits for indicating a plurality of speed subranges of a speed range (see pages 1-15).

Regarding claim 10, ETSI SMG2 discloses for operating a mobile equipment (ME) in a wireless network, comprising: Determining a value of a parameter that indicative of a signal quality experienced by the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter; and reporting the calculated indication of link quality to the wireless network; wherein determining comprises: deriving an indication of ME speed in the wireless network; and wherein the step of transmitting uses four bits for indicating 16 speed subranges within a speed range (see pages 1-15).

Regarding claims 11-12, ETSI SMG2 discloses wherein the determined parameter is used to modify and calculate a forgetting factor that influences a length of a filter that operates on link quality measurement data (see pages 1-15).

Regarding claims 13 and 14, ETSI SMG2 discloses wherein the determined parameter is used to modify and replace a forgetting factor that is received in a broadcast message from the wireless network, the forgetting factor influencing a length of a filter that operates on link quality measurement data (see pages 1-15).

Regarding claim 15, ETSI SMG2 discloses wherein the step of calculating takes into account a derivative of speed of the ME (see pages 1-15).

Regarding claim 16, ETSI SMG2 discloses wherein the step of calculating operates on a plurality of measurements of one of a mean Bit Error Probability or a coefficient of variation of a Bit Error Probability (see pages 1-15).



Art Unit: 2681

Regarding claim 17, ETSI SMG2 discloses wireless communications system comprised of a wireless network and at least one mobile equipment located in a serving cell of said wireless network, further comprising a unit in said wireless network for deriving an indication of a speed of said ME within the serving cell; a transmitter in said wireless network for transmitting the indication of the ME speed to the ME; a receiver in said ME for receiving said transmitted speed indication; a processor in said ME for implementing a filter for filtering a sequence of link quality measurement data, said filter having a filter length that is a function of a parameter having a value that is a function of said received transmitted speed indication; and a transmitter in said ME for transmitting an indication of said filtered link quality measurement data to a receiver of said wireless network (see pages 1-15).

Regarding claim 18, ETSI SMG2 also discloses wherein the step of calculating operates on a plurality of measurements of one of a mean Bit Error Probability or a coefficient of variation of a Bit Error Probability (see pages 1-15).

Regarding claim 19, ETSI SMG2 discloses a wireless communication system comprised of a wireless network and at least one mobile equipment (ME) located in a serving cell of said wireless network, further comprising a unit in said wireless network for deriving an indication of a speed of said ME within the serving cell; a transmitter in said wireless network for transmitting the indication of the ME speed to the ME; a receiver in said ME for receiving said transmitted speed indication; and a processor in said ME for implementing a filter for filtering a sequence of link quality measurement data, said filter having a filter length that is a function of a parameter having a value that is a function of said received transmitted speed indication; and a transmitter in said ME for transmitting an indication of said filtered link quality measurement data to a

Art Unit: 2681

receiver of said wireless network, wherein said transmitter in said wireless network transmits the indication of the ME speed by using a plurality of bits placed into padding bits of a Packet System Identification 13 (PSI13) message sent on a Packet Associated Control Channel (PACCH) (see pages 1-15).

Regarding claim 20, ETSI SMG2 discloses a method for operating a wireless communications system comprised of a wireless network and a plurality of mobile equipment (ME) located in at least one serving cell of said wireless network, comprising steps of: determining in the wireless network an indication of a signal quality experienced by individual ones of the plurality of ME; transmitting the determined indications to individual ones of the ME using a point-to-point message; in a particular one of the plurality of ME, receiving the transmitted indication; using the received indication for setting a length of a filter that is employed in a filtering operation that operates on a sequence of link quality measurement data; and transmitting a result of the filtering operation to the wireless network (see pages 1-15).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2681

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Nguyen whose telephone number is 703-605-4254. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika A Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

DN

David Nguyen

  
ERIKA GARY  
PATENT EXAMINER